(19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 21 July 2005 (21.07.2005)

PCT

(10) International Publication Number WO 2005/066265 A1

(51) International Patent Classification⁷:

C08L 23/10

(21) International Application Number:

PCT/IB2004/003734

(22) International Filing Date:

12 November 2004 (12.11.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/534,349

31 December 2003 (31.12.2003) US

- (71) Applicant (for all designated States except US): BASELL POLIOLEFINE ITALIA S.P.A. [IT/IT]; Via Pergolesi 25, I-20124 Milano (IT).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): PELLEGATTI, Giampaolo [IT/IT]; Via Ca Nove 4, I-44032 Baura (IT). SONG, Cheng, Q. [US/US]; 30 Bradley Drive, Wilmington, DE 19803 (US). DANG, Vu, A. [US/US]; 102 Veronica Lane, Bear, DE 19701 (US). SMITH, Jeanine, A. [US/US]; 31 Penn's Greene Drive, West Grove, PA 19390 (US).

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

of inventorship (Rule 4.17(iv)) for US only

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: FILLED OLEFIN POLYMER COMPOSITIONS HAVING IMPROVED MECHANICAL PROPERTIES AND SCRATCH RESISTANCE

(57) Abstract: Filled olefin polymer concentrates having improved mechanical properties and scratch resistance comprising: A. about 1.0 to about 40.0 wt% of an oxidized olefin polymer material; B. about 0.5 to about 40.0 of a maleated polypropylene; and C. about 7.0 to about 80.0 wt% of a filler chosen from fiberglass, carbon fibers, graphite fibers, whiskers, metal fibers, aramides, talc, wollastonite, calcium carbonate, mica, glass microspheres, ceramic microspheres, glass wool, rock wool, stainless steel wool, steel wool, gypsum, alumina, alumina-silica, silica, and mixtures thereof; wherein the sum of components A + B+ C is equal to 100 wt%.

